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ANDREA BEATTY RINIKER
Director



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STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

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July 2, 1986

Mr. Donald Meberg
Duwamish Shipyard, Inc.
5658 West Marginal Way SW
Seattle, Washington 98106

Dear Mr. Meberg:

During our visit on June 23, 1986 you asked questions regarding the EP TOX test and Ecology's use of the information.

WAC 173-303-090 Dangerous waste characteristics lists contaminants to be tested for by the EP TOX method. In addition to the elements and compounds listed in WAC 173-303-090 the Department uses the following dangerous waste minimum concentrations:

Copper 2 mg/L, Nickel 20 mg/L, Zinc 10 mg/L

Current Department policy is that when the minimum concentrations for any of the three additional listed elements are exceeded the analysis is presumed to indicate a dangerous waste and a bioassay (Static Acute Fish Toxicity test, WAC 173-303-110) is used to verify the characterization of the waste as a dangerous waste.

A draft technical memorandum proposes that the total concentration of copper, zinc and nickel not exceed 5 mg/L. When the total is 5 mg/L, the guidance is to do the bioassay.

For the EP TOX results done on your spent sand blast grit Nickel was not done and the copper had a average concentration of 4.1 mg/L and the zinc had a average concentration of 9.3 mg/L. The copper is slightly above the minimum and the zinc slightly below based on past criteria. The limited data available does not provide a basis for not doing a bioassay (Static Acute Fish Toxicity test, WAC 173-303-110).

If you have any questions please call Richard Koch at 885-1900. Please excuse the delay in answering your questions about the EP TOX test and bioassay.

Sincerely,

Richard Koch
Richard Koch
District Engineer
Environmental Quality

USEPA SF



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